

Work Order ID 97609

February-25-13 9:13:25 AM

97609

Page 1

Item ID: D2574

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle. Alt In 205

Start Date: 2/20/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 3/08/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 13-02-25 Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2574

F

100

0.00

100

HAAS CNC VERTICAL MACHINING #1

HAAS 1

0.00

HAAS CNC vertical machine #1

Memo

Program Batch No. 97609

FR: 13/03/12

Double check by: SS

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets

2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets

3-Machine Step No 3 per Folio FA051 and insp

12

D4
335

[Handwritten signature]

110

0.00

110

CONVENTIONAL MILLING MACHINE

Mill Conv

0.00

Conventional Milling Machine

Memo

Machine keyway as per dwg D2573 & D2574

FR 13/03/12

12

D4
335

[Handwritten signature]

Work Order ID 97609

February-25-13 9:13:26 AM

97609

Page 2

Item ID: D2574

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Saddle, Aft In 205

Stop ***NS2***

Start Date: 2/20/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 3/08/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

FK 13/03/12

12

D4
333
88

Quality Control

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.00

12

DAS
25
13-3-18

Quality Control

140

Chemical Conversion Coat per QS1005 4.1

0.00

140

HandFinish

Memo

0.00

12

13-3-19

Hand Finishing

Work Order ID 97609

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97609

Page 3

Item ID: D2574

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Saddle. Aft In 205

Stop *NS2*

Start Date: 2/20/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 3/08/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

150

Powdercoat

Powder Coating

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

3:45
320°F
4:15

0.00

0.00

0.00

0.00

0.00

12xØ M/L 12/03/20

M124245

160

QC3- Inspect Part Finish

0.00

160

QC

Quality Control

Memo



13.3 21

12

170

Identify as per dwg & Stock Location:

0.00

170

Packaging

Packaging

Memo

54
942

43/3/21 12

Work Order ID 97609

February-25-13 9:13:26 AM

97609

Page 4

Item ID: D2574

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Saddle, Aft In 205

Stop ***NS2***

Start Date: 2/20/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 3/08/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

13/3/22 *[Signature]*
MK
13-3-21

Picklist Print

February-21-13 1:06:27 PM

Page 1

Work Order ID: 97609

Parent Item: D2574

Parent Item Name: Saddle, Aft In 205

Start Date: 2/20/13

Required Date: 3/08/13

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev: I As Per RevE 06-01-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-005 Saddle Billet		Manufactured	No			110	Each	43.0000	1	12			

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT041	2	
76838	2	
MAT044	39	
* 79874	11	
81973	4	
90528	4	
* 92660	20	
MAT045	2	
88960	2	

3

9

FK 13/03/08

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input checked="" type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <table style="width:100%; font-size: small;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input checked="" type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input checked="" type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>		
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>																									
Machining <input checked="" type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>																									
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>																									
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																										
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector																			
Doc/Data <input checked="" type="checkbox"/>	13/3/13	106	1	Flange chamfer is too deep, = 0.100 deep chamfer. Folio problem	GP 13/3/13	Cosmetic only Acceptable	GP 13/3/13	S 13/3/13	S 13/3/13																			
Equip/Tooling <input type="checkbox"/>																												
Operator <input type="checkbox"/>																												
Material <input type="checkbox"/>																												
Setup <input type="checkbox"/>																												
Other <input type="checkbox"/>																												
Process <input type="checkbox"/>																												
Supplier <input type="checkbox"/>																												
Training <input type="checkbox"/>	Fix Folio + Program	 13/3/13	 13.03/14																									
Unapproved <input type="checkbox"/>	FAULT CATEGORY																											
Landing Gear			General																									
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<table style="width:100%; font-size: small;"> <tr> <td><input type="checkbox"/> Ovalized</td> <td><input type="checkbox"/> Pressure/Forced</td> </tr> <tr> <td><input type="checkbox"/> Centre Not Concentric to O/S</td> <td><input type="checkbox"/> Temperature/Cure</td> </tr> <tr> <td><input type="checkbox"/> Cracks</td> <td><input type="checkbox"/> Weld</td> </tr> <tr> <td><input type="checkbox"/> Crushed/Crimped</td> <td><input type="checkbox"/> Wrong Stock Pulled</td> </tr> <tr> <td><input type="checkbox"/> Cuffs</td> <td><input type="checkbox"/> Other</td> </tr> <tr> <td><input type="checkbox"/> Heat Treat</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Inspection Strip in Tube</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Ripples in Bend</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Torque Waves in Extrusion</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Turning Sequence</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Wave/Twist in Tube</td> <td></td> </tr> </table>				<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced	<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> Temperature/Cure	<input type="checkbox"/> Cracks	<input type="checkbox"/> Weld	<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Other	<input type="checkbox"/> Heat Treat		<input type="checkbox"/> Inspection Strip in Tube		<input type="checkbox"/> Ripples in Bend		<input type="checkbox"/> Torque Waves in Extrusion		<input type="checkbox"/> Turning Sequence		<input type="checkbox"/> Wave/Twist in Tube	
<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced																											
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<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Wrong Stock Pulled																											
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Other																											
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<input type="checkbox"/> Torque Waves in Extrusion																												
<input type="checkbox"/> Turning Sequence																												
<input type="checkbox"/> Wave/Twist in Tube																												
<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware																											
<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete																											
<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear																											
<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance																											
<input type="checkbox"/> Countersink	<input type="checkbox"/> Misabeled																											
<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread																											
<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset																											
<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration																											
<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence																											
<input checked="" type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions																											

DART AEROSPACE LTD	Work Order: 97609
Description: Saddle, Aft Inboard	Part Number: D2574
Inspection Dwg: D2574 Rev. E <i>EF 4c</i>	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.008	8.001	8.000	8.000		
F	0.490	0.510		.505	.499	.499	.499		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.375	.375	.375	.375		
I	0.490	0.510		.502	.502	.503	.502		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.568	.568	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.124	.124	.124	.124		
Q	0.115	0.135		.130	.130	.130	.130		
R	0.240	0.260		.250	.250	.250	.250		
S	0.115	0.135		.125	.127	.127	.127		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.237	.240	.239	.239		
W	0.115	0.135		.132	.132	.132	.132		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.363	.363	.368		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.625	.624	.625	.624		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.242	.245	.251	.250		
AE	1.500	1.520		1.513	1.5135	1.513	1.5135		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.255	.255	.255	.252		
AH	0.240	0.260		.247	.247	.248	.247		
AI	2.000	2.020		2.0035	2.004	2.0035	2.004		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by: <i>FK 1 BG</i>
Date: <i>13/03/12</i>

Audited by: <i>DAS</i>
Date: <i>25 13-3-18</i>

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	<i>AK</i>

DART AEROSPACE LTD	Work Order: 97605
Description: Saddle, Aft Inboard	Part Number: D2574
Inspection Dwg: D2574 Rev. <i>FFAL</i>	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		.495	.495	.496	.496		
G	0.257	0.262		.257	.257	.257	.257		
H	0.375	0.380		.375	.375	.375	.375		
I	0.490	0.510		.504	.504	.504	.504		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.569	.570	.569	.570		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.124	.124	.124	.124		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.248	.248	.248	.248		
S	0.115	0.135		.126	.126	.126	.126		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.232	3.232	3.232	3.232		
V	0.230	0.250		.242	.242	.242	.242		
W	0.115	0.135		.131	.131	.132	.132		
X	0.307	0.312		.311	.311	.311	.311		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.364	.364	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.628	.628	.628	.628		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.248	.248	.248	.248		
AE	1.500	1.520		1.514	1.514	1.514	1.514		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.247	.246	.247	.247		
AI	2.000	2.020		2.004	2.004	2.004	2.004		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by: <i>FK-1BC</i>
Date: <i>13/03/18</i>

Audited by: <i>DE</i>
Date: <i>2.03.13-3-18</i>

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	<i>[Signature]</i>

DART AEROSPACE LTD	Work Order:	97609
Description: Saddle, Aft Inboard	Part Number:	D2574
Inspection Dwg: D2574 Rev. <i>E F</i>		Page 1 of 1

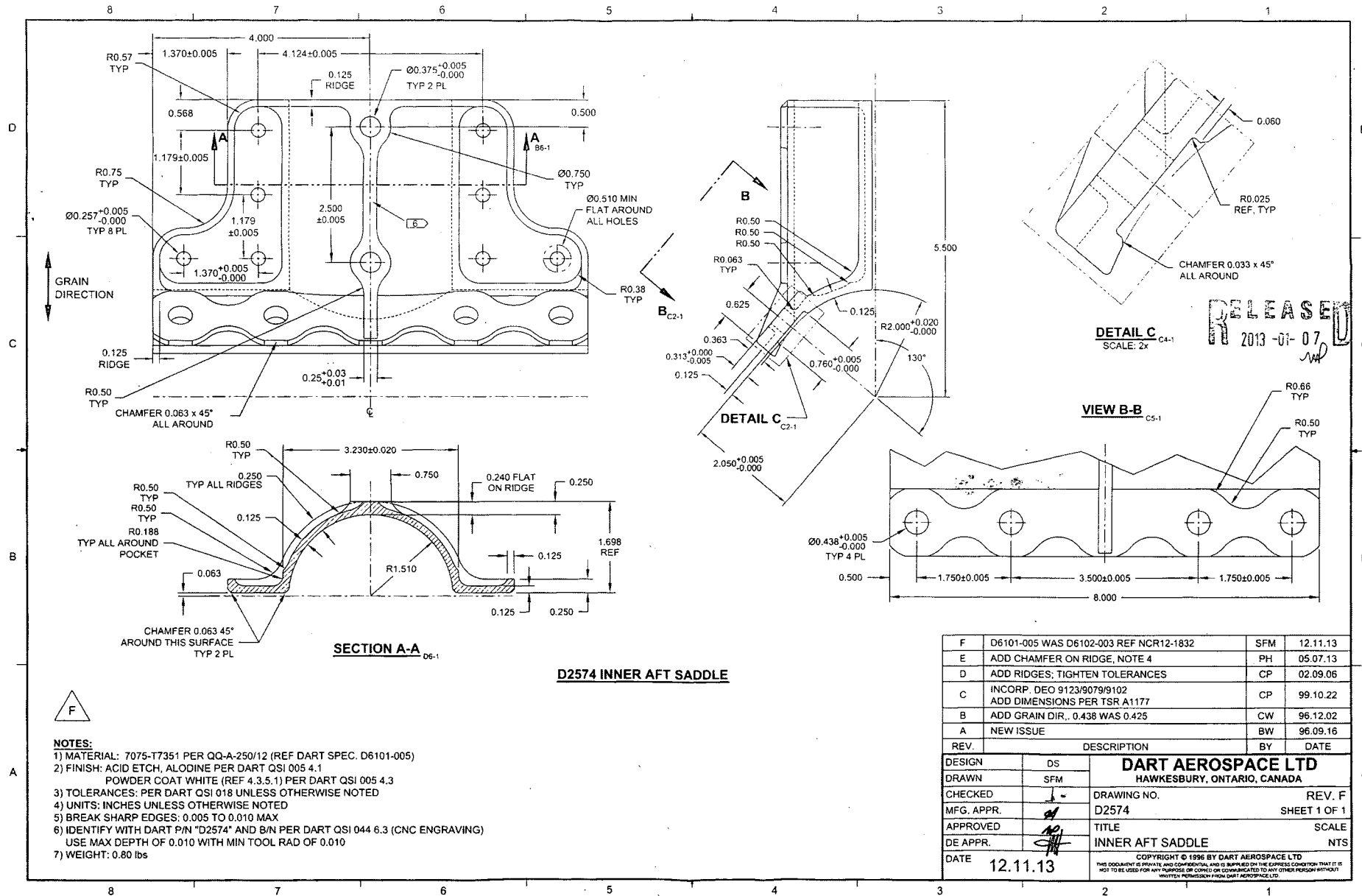
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				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	1	2	3	4		
A	0.438	0.443		.437	.437	.437	.437		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.001	8.001	8.001		
F	0.490	0.510		.498	.497	.497	.498		
G	0.257	0.262		.257	.257	.257	.257		
H	0.375	0.380		.375	.375	.375	.375		
I	0.490	0.510		.502	.503	.502	.504		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.570	.571	.570	.570		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.125	.125	.125	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.251	.251	.250		
S	0.115	0.135		.128	.129	.129	.129		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.232	3.232	3.232	3.232		
V	0.230	0.250		.237	.237	.237	.237		
W	0.115	0.135		.132	.132	.132	.132		
X	0.307	0.312		.311	.311	.311	.311		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.364	.364	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.627	.628	.628		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.246	.246	.246	.246		
AE	1.500	1.520		1.514	1.514	1.514	1.514		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.275	.275	.275	.275		
AH	0.240	0.260		.247	.248	.246	.247		
AI	2.000	2.020		2.005	2.005	2.005	2.005		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	BC
Date:	13-03-15

Audited by:	
Date:	13-3-18

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	



97609 MJS
13-02-25